What is claimed is:

1. A recording probe having a distal end, an ultimate distal end and a proximal end comprising:

an elongated body elongated along an first axis and having an outer surface and an ultimate distal end;

a distensible sheath surrounding the elongated body at the distal end of the probe, the sheath having an outside surface, an inside surface and a distal end, the sheath attached to the body proximal to the ultimate distal end of the body;

at least one distal recording electrode located at the distal end of the sheath and directed away from the outside surface of the sheath; and

a distending member, having an outer surface, attached to the body within the sheath, the distending member attached to the body distal to the point of attachment of the sheath.

2. The probe of claim 1 wherein the sheath includes a first wing and a second wing each of which are attached to the body proximal to the ultimate distal end of the body.

3. The probe of claim 2 wherein the distending member is an inflatable balloon.

4. The probe of claim 3 wherein the inflatable balloon includes an inflation lumen.

5. The probe of claim 4 wherein the inflation lumen runs through the body.

placing a probe having at least one recording electrode into the anal canal or vagina;

placing a stimulation electrode, connected to a pulse generator, near the spinal cord or sacral nerves;

producing electrical stimulation pulses at the stimulation electrode; and

detecting the resulting electrical activity in the pelvic organs or pelvic floor by the recording electrode.

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~~78.~~ The method of claim ~~77~~ further comprising the step of timing the time between the application of a stimulation pulse by the stimulation electrode and the detection of the resulting electrical activity in the pelvic organs or pelvic floor by the recording electrode.

Add (x2)

6. The probe of claim 1 wherein the sheath is made of a flexible material chosen from the group consisting of polyurethane, silicone, silastic materials, thermoplastics, polymers, nylon and polytetrafluoroethylene .

7. The probe of claim 1 further comprising at least one proximal recording electrode located on the body proximal to the distal recording electrode.

8. The probe of claim 7 wherein at least one proximal recording electrode is elongated in a preferred direction.

9. The probe of claim 8 wherein the preferred direction of elongation of the proximal recording electrode is substantially parallel to the axis of the body .

10. The probe of claim 8 wherein the preferred direction of elongation of the proximal recording electrode is substantially perpendicular to the axis of the body .

11. The probe of claim 8 wherein the preferred direction of elongation of the proximal recording electrode has substantial components both parallel and perpendicular to the axis of the body

12. The probe of claim 1 wherein at least one distal recording electrode is elongated in a preferred direction.

13. The probe of claim 12 wherein the preferred direction of elongation of the distal recording electrode is substantially parallel to the axis of the body .

14. The probe of claim 12 wherein the preferred direction of elongation of the distal recording electrode is substantially perpendicular to the axis of the body .

15. The probe of claim 12 wherein the preferred direction of elongation of the distal recording electrode has substantial components both parallel and perpendicular to the axis of the body.

16. The probe of claim 1 further comprising a locating structure located near the proximal end of the probe to aid in securely locating the probe.

17. The probe of claim 16 wherein the locating structure is a movable ring that is movable proximally and distally along the outer surface of the body.

18. The probe of claim 17 wherein the movable ring is made of a relatively hard, resilient plastic foam.

19. The probe of claim 16 wherein the locating structure is an external locating balloon.

20. The probe of claim 19 wherein the external locating balloon includes an inflation lumen to inflate the external locating balloon.

21. A recording probe having a distal end, an ultimate distal end and a proximal end comprising:

an elongated body elongated along an first axis and having an outer surface and an ultimate distal end;

at least one first distal recording electrode located at the distal end of the body and directed away from the outer surface of the body.

22. The probe of claim 21 further comprising at least one proximal recording electrode located on the body proximal to the first distal recording electrode.

23. The probe of claim 22 wherein at least one proximal recording electrode is elongated in a preferred direction.

24. The probe of claim 23 wherein the preferred direction of elongation of the proximal recording electrode is substantially parallel to the axis of the body .

25. The probe of claim 23 wherein the preferred direction of elongation of the proximal recording electrode is substantially perpendicular to the axis of the body .

26. The probe of claim 23 wherein the preferred direction of elongation of the proximal recording electrode has substantial components both parallel and perpendicular to the axis of the body

27. The probe of claim 22 further comprising at least one second distal recording electrode attached to the outer surface of the body proximal to the first distal recording electrode and distal to the proximal recording electrode, the second distal recording electrode directed away from the outer surface of the body.

28. The probe of claim 21 wherein at least one first distal recording electrode is elongated in a preferred direction.

29. The probe of claim 28 wherein the preferred direction of elongation of the first distal recording electrode is substantially parallel to the axis of the body .

30. The probe of claim 28 wherein the preferred direction of elongation of the first distal recording electrode is substantially perpendicular to the axis of the body .

31. The probe of claim 28 wherein the preferred direction of elongation of the first distal recording electrode has substantial components both parallel and perpendicular to the axis of the body.

32. The probe of claim 21 further comprising a locating structure located near the proximal end of the probe to aid in securely locating the probe.

33. The probe of claim 32 wherein the locating structure is a movable ring that is movable proximally and distally along the outer surface of the body.

34. The probe of claim 33 wherein the movable ring is made of a relatively hard, resilient plastic foam.

35. The probe of claim 32 wherein the locating structure is an external locating balloon.

36. The probe of claim 35 wherein the external locating balloon includes an inflation lumen to inflate the external locating balloon.

37. A recording probe having a distal end, an ultimate distal end and a proximal end comprising:

an elongated body elongated along an first axis and having an outer surface and an ultimate distal end;

a first distending member, having an outer surface, attached to the body proximal to the ultimate distal end of the body;

at least one distal recording electrode located on the distending member and directed away from the outer surface of the distending member.

38. The probe of claim 37 further comprising at least one proximal recording electrode located on the body proximal to the distal recording electrode.

39. The probe of claim 38 wherein at least one proximal recording electrode is elongated in a preferred direction.

40. The probe of claim 39 wherein the preferred direction of elongation of the proximal recording electrode is substantially parallel to the axis of the body .

41. The probe of claim 39 wherein the preferred direction of elongation of the proximal recording electrode is substantially perpendicular to the axis of the body .

42. The probe of claim 39 wherein the preferred direction of elongation of the proximal recording electrode has substantial components both parallel and perpendicular to the axis of the body

43. The probe of claim 37 wherein at least one distal recording electrode is elongated in a preferred direction.

44. The probe of claim 43 wherein the preferred direction of elongation of the distal recording electrode is substantially parallel to the axis of the body .

45. The probe of claim 43 wherein the preferred direction of elongation of the distal recording electrode is substantially perpendicular to the axis of the body .

46. The probe of claim 43 wherein the preferred direction of elongation of the distal recording electrode has substantial components both parallel and perpendicular to the axis of the body.

47. The probe of claim 37 further comprising a locating structure located near the proximal end of the probe to aid in securely locating the probe.

48. The probe of claim 47 wherein the locating structure is a movable ring that is movable proximally and distally along the outer surface of the body.

49. The probe of claim 48 wherein the movable ring is made of a relatively hard, resilient plastic foam.

50. The probe of claim 47 wherein the locating structure is an external locating balloon.

51. The probe of claim 50 wherein the external locating balloon includes an inflation lumen to inflate the external locating balloon.

52. The probe of claim 37 further comprising a second distending member located distal to the first distending member, the second distending member having an outer surface.

53. The probe of claim 52 wherein the second distending member has at least one second recording electrode attached to its outer surface.

54. The probe of claim 52 wherein the second distending member is a balloon.

55. The probe of claim 52 further comprising a third distending member located distal to the second distending member, the second distending member having an outer surface.

56. The probe of claim 55 wherein the third distending member has at least one third recording electrode attached to its outer surface.

57. The probe of claim 56 wherein the third distending member is a balloon.

58. The embodiment of claim 37 further comprising at least one body recording electrode attached to the distal end of the body.

59. A recording probe comprising:

a disk body having an upper surface and a lower surface;

at least one first recording electrode located at the upper surface of the disk body and directed away from the upper surface of the disk body.

60. The probe of claim 59 further comprising at least one second recording electrode located on the lower surface of the disk body.

61. The probe of claim 59 wherein the disk body is made of a flexible material.

62. The probe of claim 59 further comprising a body for aiding in the placing the disk body, the body attached to the lower surface of the disk body.

63. A recording probe comprising:

a clip having an inner surface and an outer surface;

at least one first recording electrode located on the inner surface of the clip and directed away from the inner surface of the clip.

64. The probe of claim 63 wherein the clip is essentially "C" shaped.

65. The probe of claim 63 wherein the clip is coated with a coat of an insulating biocompatible material.

66. The probe of claim 63 further comprising at least one second recording electrode located on the outer surface of the clip.

67. A system for quantifying nerve and neural-muscular integrity related to pelvic organs or pelvic floor functions comprising:

a probe having a recording electrode; and

a control device connected to the recording electrode for interpreting electrical activity detected by the recording electrode, the control device having an output.

68. The system of claim 67 wherein the control device includes an amplifier/filter, connected to the recording electrode, that processes electrical activity detected by the recording electrodes to produce a signal that indicates the electrical activity of the nerves in the pelvic floor, the amplifier/filter having an output wherein the signal that indicates the electrical activity of the nerves in the pelvic floor is presented at the output.

69. The system of claim 67 further comprising a display device, connected to the output of the control device, that graphically indicates the electrical activity detected by the recording electrode.

70. The system of claim 69 wherein the display device is chosen from a group consisting of a video monitor, LCD screen, a printer or an audible alarm.

71. The system of claim 67 further comprising a stimulation system and at least one stimulation electrode used to create efferent nerve signals that are ultimately detected by the at least one recording electrode on the probe.

72. The system of claim 71 wherein the stimulation system includes a pulse generator.

73. The system of claim 72 where the pulse generator is an implantable pulse generator.

74. The system of claim 73 where the pulse generator is an RF powered pulse generator.

75. The system of claim 67 further comprising:

a stimulation output circuit that produces a timing signal along with the pulse or a series of pulses that is applied to the stimulation electrodes; and,

a timer, connected to the stimulation output circuit and receiving the timing signal, for timing the time between the application of a stimulation pulse by the stimulation electrode and the detection of the resulting electrical activity in the pelvic organs or pelvic floor by the recording electrode.

76. The system of claim 67 wherein the pulse generator produces output pulses of variable amplitude.

77. A method of quantifying nerve and neural-muscular integrity related to pelvic organs or pelvic floor functions comprising the steps of: